Appl. No. 10/553,931 Amdt. dated April 26, 2011

Reply to Office Action of October 28, 2010

Amendments to the Claims:

The following listing of claims, in which deleted matter is either struck-through or enclosed in double brackets, and added material (except for newly presented claims) is underlined, replaces all prior versions and listings of claims in this application.

- 1. (Currently Amended) A method for making a signal transmission tube, the method comprising extruding over an elongate rod a confinement tube having an inner wall defining an interior of the confinement tube, the rod being comprised of a solid reactive polymeric material having reactive pendant groups chemically bonded to the polymer backbone and being configured to provide a continuous, longitudinally extending unoccupied portion of the interior of the confinement tube.
- 2. (Previously Presented) The method of claim 1 wherein the interior of the confinement tube is substantially free of unembedded pulverulent reactive material.
- 3. (Original) The method of claim 1 wherein the reactive polymeric material comprises a GAP material.
- 4. (Original) The method of claim 3 wherein the reactive polymeric material comprises a GAP resin that has been cross-linked with a multifunctional dipolarophile material.
- 5. (Currently Amended) A method for making a signal transmission tube, the method comprising forming a confinement tube having an inner wall defining an interior of the confinement tube, and disposing a layer of paint on the inner wall of the confinement tube, wherein the paint comprises a reactive polymeric material having reactive pendant groups chemically bonded to the polymer backbone and the layer of paint is configured to provide a continuous, longitudinally extending unoccupied portion of the interior of the confinement tube.
 - 6. Canceled.

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- 7. (Currently Amended) A signal transmission tube comprising a reactive polymeric material <u>having reactive pendant groups chemically bonded to the polymer backbone and being</u> configured as a solid elongate rod, the rod being [[and]] disposed within a confinement tube having an inner wall defining an interior of the confinement tube, wherein the reactive polymeric material rod is configured to provide a continuous, longitudinally extending unoccupied portion of the interior of the confinement tube.
- 8. (Previously Presented) The signal transmission tube of claim 7 wherein the interior of the confinement tube is substantially free of unembedded pulverulent reactive material.
- 9. (Original) The signal transmission tube of claim 8 wherein the reactive polymeric material comprises a GAP material.
- 10. (Currently Amended) A signal transmission tube comprising a confinement tube having an inner wall defining an interior defined by an inner wall of the confinement tube, and a reactive polymeric material configured as a layer of paint disposed on the inner wall of the confinement tube to provide a continuous, longitudinally extending unoccupied portion of the interior of the confinement tube, the paint comprising a reactive polymeric material which is configured to provide a continuous, longitudinally extending unoccupied portion of the interior of the confinement tube having reactive pendant groups chemically bonded to the polymer backbone.
- 11. (Currently Amended) The signal transmission tube of claim 10 wherein the **[[a]]** reactive polymeric material comprises a GAP material.
- 12. (Previously Presented) The signal transmission tube of claim 7, claim 8 or claim 9 wherein the rod is configured to have one or more radially extending portions thereof act as spacers between the rod and the inner wall of the confinement tube, whereby to define between the rod and the inner wall the continuous, longitudinally extending unoccupied portion.

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- 13. (Previously Presented) The signal transmission tube of claim 7, claim 8 or claim 9, wherein the rod is configured to have a longitudinal bore extending therethrough, the longitudinal bore defining the continuous, longitudinally extending unoccupied portion.
- 14. (Currently Amended) A method for making a signal transmission tube, which tube consists of a reactive polymeric material <u>having reactive pendant groups</u> <u>chemically bonded to the polymer backbone</u>, the method comprising extruding the reactive polymeric material into tubular form.
- 15. (Currently Amended) A method of making a signal transmission tube, which tube consists of a reactive polymeric material <u>having reactive pendant groups</u> <u>chemically bonded to the polymer backbone, the reactive polymeric material</u> having one or more pulverulent reactive materials blended therein.

16 - 18. Canceled.

- 19. (Currently Amended) A signal transmission tube <u>in the form of a tube</u> <u>and</u> consisting of a reactive polymeric material <u>in the form of a tube having reactive</u> <u>pendant groups chemically bonded to the polymer backbone.</u>
- 20. (Currently Amended) A signal transmission tube consisting of a reactive polymeric material <u>having reactive pendant groups chemically bonded to the polymer backbone and</u> having embedded therein one or more pulverulent reactive materials.

21 - 23. Canceled.

- 24. (Currently Amended) The signal transmission tube of claim 19 or claim 20 wherein the reactive polymeric material comprises a GAP material.
- 25. (Original) The signal transmission tube of claim 24 comprising a GAP resin that has been cross-linked by a multifunctional dipolarophile material.

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- 26. (Currently Amended) A method for making a signal transmission tube, comprising extruding a reactive polymeric material <u>having reactive pendant groups</u> <u>chemically bonded to the polymer backbone</u> into tubular form, extruding a sheath over the resulting tubular reactive polymeric tube, the sheath being configured to be fractured by reaction of the reactive polymeric material.
- 27. (Currently Amended) A method for making a signal transmission tube, comprising extruding a reactive polymeric material <u>having reactive pendant groups</u> <u>chemically bonded to the polymer backbone</u> into tubular form, extruding a sheath over the resulting tubular reactive polymeric tube, the sheath being configured to be consumed by reaction of the reactive polymeric material.
- 28. (Previously Presented) The method of claim 26 or claim 27 wherein the reactive polymeric material comprises a GAP material.
- 29. (Previously Presented) The method of claim 26 or claim 27 wherein the reactive polymeric material comprises a GAP resin that has been cross-linked by a multifunctional dipolarophile material.
- 30. (New) The method of any one of claims 14, 15, 26 or 27 wherein the reactive pendant groups are selected from the group consisting of one or more of azido groups, nitrate groups, triazoline groups and triazole groups.
- 31. (New) The signal transmission tube of any one of claims 7, 10, 19 and 20 wherein the reactive pendant groups are selected from the group consisting of one or more of azido groups, nitrate groups, triazoline groups and triazole groups.